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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/527,212	11/28/2005	Heinz Mueller	5007447.001US1	9631
29737	7590	05/13/2009		
SMITH MOORE LEATHERWOOD LLP			EXAMINER	
P.O. BOX 21927			KUGEL, TIMOTHY J	
GREENSBORO, NC 27420				
			ART UNIT	PAPER NUMBER
			1796	
			NOTIFICATION DATE	DELIVERY MODE
			05/13/2009	ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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Office Action Summary	Application No. 10/527,212	Applicant(s) MUELLER ET AL.	
	Examiner Timothy J. Kugel	Art Unit 1796	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 30 March 2009.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 27-30,32-36 and 38-48 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 27-30,32-36 and 38-48 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. Claims 27-30, 32-36 and 38-48 are pending as amended on 30 March 2009, claims 1-26, 31, 37 and 49-55 being cancelled.
2. The text of those sections of Title 35, US Code not included in this action can be found in a prior Office action.

Response to Amendment and Argument

3. Applicant's cancellation of claims 31, 37 and 49-55 have rendered the following moot:

The rejection of claims 31, 37, 50 and 53-55 under 35 USC 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention has been withdrawn.

The rejection of claims 31, 37 and 49-55 under 35 USC 102(b) as being anticipated by or, in the alternative, under 35 USC 103(a) as being unpatentable over International Patent Application Publication WO 02/053675 (Muller '675) has been withdrawn.

The rejection of claims 31, 37 and 49-55 under 35 USC 102(e) as being anticipated by or, in the alternative, under 35 USC 103(a) as being unpatentable over US Patent Application Publication 2003/0144153 (Kirsner) has been withdrawn.

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4. Applicant's amendment to claims 27 and 35, removing the parenthetical limitations, has overcome the following:

The rejection of claims 27-30, 32-36 and 38-48 under 35 USC 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention has been withdrawn.

5. Applicant's amendment to independent claim 27, requiring the presence of 5 to 22 carbon atom paraffins and making the presence of 12 to 30 carbon atom internal olefins, has been fully considered and distinguishes over Muller '675.

The rejection of claims 27-30, 33-35, 38, 41-45 and 47-48 under 35 USC 102(b) as being anticipated by or, in the alternative, under 35 USC 103(a) as being unpatentable over Muller '675 has been withdrawn.

The rejection of claims 39 and 40 under 35 USC § 103(a) as being unpatentable over Muller '675 in view of US Patent 5,318,954 (Muller '954) has been withdrawn.

Applicant's further arguments have been fully considered but are not persuasive.

Applicant argues that Kirsner, in teaching that the paraffins should be less than 50 weight percent of the oil phase, fails to anticipate or obviate the instant claims; however, Kirsner in fact teaches that the paraffins may be present at 1 to 99 weight percent of the blend with the less than 50 weight percent being merely a preference. Further, it is the examiner's position that the preferred range of less than **about** 50

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weight percent (emphasis added) anticipates the 50 weight percent of the instantly claimed range.

Regarding applicant's contention that there exists an unexpectedly low toxicity within the claimed range of paraffin concentration: since it is the examiner's contention that this range is anticipated by the closest prior art, Kirsner, a finding of unexpected results is not sufficient to overcome the rejections.

Claim Rejections - 35 USC § 102 and/or 103

6. Claims 27-30, 32-36, 38 and 41-38 are rejected under 35 USC 102(e) as being anticipated by or, in the alternative, under 35 USC 103(a) as being unpatentable over Kirsner.

Kirsner teaches invert drilling fluids (0003) comprising between about 50:50 and 95:5 by volume a oil phase to water phase (0007) wherein the oil phase is a blend of esters—comprised of an about C₆ to about C₁₄ fatty acid reacted with 2-ethyl hexanol—and C₁₀-C₃₀ internal olefins or C₁₂₋₁₆ linear paraffins and wherein the esters may be of any quantity but preferably should comprise at least about 10 to about 99 weight percent of the oil phase and the paraffins may be of from 1 to 99 weight percent, preferably less than about 50 weight percent of the blend (0015, 0065 and 0068), further comprising other components such as emulsifiers (0016) and having plastic viscosity and yield points within the scope of the instant claims (Table 5 Page 8).

Kirsner does not disclose expressly paraffins being at least 50 weight percent; however Kirsner's teaching of less than ***about*** 50 weight percent (emphasis added)

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anticipates the 50 weight percent of the claimed range. Further, it has been held that when the difference between a claimed invention and the prior art is the range or value of a particular variable, then a *prima facie* rejection is properly established when the difference in the range or value is minor. See *Titanium Metals Corp of Am v Banner*, 778 F2d 775, 783, 227 USPQ 773, 779 (Fed Cir 1985).

Kirsner does not disclose expressly esters produced from an acid having 15 to 25 carbon atoms; however, the teaching of Kirsner of about C₁₄ would at least anticipate C₁₅ fatty acids.

Further, it would be obvious to one of ordinary skill in the art to increase the number of carbons on the "acid" portion of the ester by two or more—that is to between 16 and 25—for the purpose of increasing the lipophilic nature of the ester to increase its compatibility with the olefin or paraffin component in the inverse emulsion and since a *prima facie* case of obviousness may be made when chemical compounds have very close structural similarities and similar utilities. "An obviousness rejection based on similarity in chemical structure and function entails the motivation of one skilled in the art to make a claimed compound, in the expectation that compounds similar in structure will have similar properties." See MPEP 2144.09(I), *In re Payne*, 606 F2d 303, 313, 203 USPQ 245, 254 (CCPA 1979), *In re Papesch*, 315 F2d 381, 137 USPQ 43 (CCPA 1963) and *In re Dillon*, 919 F2d 688, 16 USPQ2d 1897 (Fed Cir 1991).

Since Kirsner teaches the production of the drilling fluid, it meets the processes of claims 49, 51 and 52 because the esters must be added to the drilling fluid.

Since Kirsner teaches the same composition as claimed, the toxicity, pour point, lubricating and structural agent reducing properties of the Kirsner composition would inherently be the same as claimed. If there is any difference between the product of Kirsner and the product of the instant claims the difference would have been minor and obvious. "Products of identical chemical composition can not have mutually exclusive properties." A chemical composition and its properties are inseparable. Therefore, if the prior art teaches the identical chemical structure, the properties applicant discloses and/or claims are necessarily present. See MPEP 2112.01(I) , *In re Best*, 562 F2d at 1255, 195 USPQ at 433, *Titanium Metals Corp v Banner*, 778 F2d 775, 227 USPQ 773 (Fed Cir 1985), *In re Ludtke*, 441 F2d 660, 169 USPQ 563 (CCPA 1971) and *Northam Warren Corp v D F Newfield Co*, 7 F Supp 773, 22 USPQ 313 (EDNY 1934).

7. Claims 39 and 40 are rejected under 35 USC § 103(a) as being unpatentable over Kirsner as applied to claims 27-30, 32-36, 38 and 41-38 above in view of Muller '954.

The teachings of Kirsner are detailed in the rejection of claims 27-30, 32-36, 38 and 41-38 under 35 USC 102(e) or, in the alternative, under 35 USC 103(a).

Kirsner does not disclose expressly the further use of other esters, for example those that are the reaction product of C₁₋₅ monocarboxyl acids with C₆₊ monofunctional alcohols.

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Muller '954 discloses invert emulsion drilling muds (Column 1 Lines 10-28) comprising esters based on carboxylic acids having 1 to 5 carbon atoms (Column 2 Lines 45-57) and alcohols having at least 6 carbon atoms (Column 3 Lines 31-51).

At the time of the invention, it would have been obvious to a person of ordinary skill in the art to include the esters of Muller '954 in the composition of Kirsner. The rationale to do so would have been the motivation provided by the teaching of Muller '954 that to do so would predictably increase the environmental compatibility of the drilling mud (Muller '954 Column 1 Lines 10-28).

Since Kirsner and Muller combine to teach the same composition as claimed, the toxicity, pour point, lubricating and structural agent reducing properties of the Kirsner/Muller '954 composition would intrinsically be the same as claimed. If there is any difference between the product of Kirsner and Muller '954 and the product of the instant claims the difference would have been minor and obvious. "Products of identical chemical composition can not have mutually exclusive properties." A chemical composition and its properties are inseparable. Therefore, if the prior art teaches the identical chemical structure, the properties applicant discloses and/or claims are necessarily present. See MPEP 2112.01(I) , *In re Best*, 562 F2d at 1255, 195 USPQ at 433, *Titanium Metals Corp v Banner*, 778 F2d 775, 227 USPQ 773 (Fed Cir 1985), *In re Ludtke*, 441 F2d 660, 169 USPQ 563 (CCPA 1971) and *Northam Warren Corp v D F Newfield Co*, 7 F Supp 773, 22 USPQ 313 (EDNY 1934).

Conclusion

8. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Timothy J. Kugel whose telephone number is 571-272-1460. The examiner can normally be reached on 5:30 AM - 4:00 PM Monday - Thursday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, James J. Seidleck can be reached on 571-272-1078. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

10. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for

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published applications may be obtained from either Private PAIR or Public PAIR.

Status information for unpublished applications is available through Private PAIR only.

For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Timothy J. Kugel/
Primary Examiner, Art Unit 1796